

ABSTRACT OF THE DISCLOSURE

A thermal management system for fast charging and subsequent heavy use operation of high-capacity batteries. The thermal management system includes at least one motive driver arranged to impinge air on the terminal and strap structure of the high capacity battery. The terminal and strap structure in a specific aspect of the invention is protectively shrouded by a cover including a main top surface member having air inflow openings therein and a circumscribing wall depending downwardly therefrom and provided with gas egress openings along its medial and end portions. Such cover allows a high flux flow of air therethrough, for high efficiency cooling of the battery during fast charging and subsequent heavy use operation.